

REMARKS

Applicant acknowledges the receipt of the Office Action dated 12 July 2005 in which the Examiner:

- 1) objected to the drawings as including reference numbers 73, 94, and 96 not otherwise mentioned in the specification;
- 2) objected to the drawings as using multiple reference numbers to refer to a "retraction plate;"
- 3) rejected claims 1-5, 7-22, 24-27, and 29-40 under 35 U.S.C. 102(b) as anticipated by *Sameshima et al.* (U.S. Pat. No. 6,453,135);
- 4) rejected claims 6 and 23 under 35 U.S.C. 103(a) as obvious over the combination of *Sameshima et al* and *Merrifield et al.* (U.S. Pat. No. 6,246,841); and
- 5) rejected claim 28 under 35 U.S.C. 103(a) as obvious over the combination of *Sameshima et al* and *Morita et al.* (U.S. Pat. No. 5,262,824).

In this Response, Applicants are:

- 1) amending the drawings by providing a replacement sheet for Figs. 6 and 7;
- 2) amending the specification by replacing paragraphs [0031] and [0035] in their entirety; and
- 3) amending claims 1, 11, 12, 16, and 30.

Changes to the specification are made by presenting the above replacement paragraphs marked up to show changes made relative to the prior version. All changes are shown by underlining the added text and double-bracketing and/or strikethrough of deleted text. The claims are amended as shown above, with amendment status also indicated. All changes are shown by underlining the added text and double-bracketing and/or strikethrough of deleted text.

A. Drawing Changes

The Examiner has objected to the Drawings for two separate reasons. First, the Examiner indicated that reference numbers 73, 94, and 96 are shown in the drawings, but not mentioned in the description. With regards to reference numbers 73 and 96, these items are respectively mentioned in original and amended paragraphs [0031] and [0035]. Thus, the grounds for objection based on these two reference numbers are moot. With regards to reference number 94, Applicants concur with the Examiner's assertion. Accordingly, the specification changes explicated below add a description of reference number 94 to correct this discrepancy. Therefore, Applicants respectfully request withdrawal of the first drawing objection.

Second, the Examiner objected to the drawings as using multiple reference numbers to refer to a "retraction plate." Specifically, the reference numbers 46 and 47 are used to describe the specified retraction plate. Pursuant to this objection, Applicants have amended Fig. 6 and Fig. 7 as shown in the attached Replacement Sheet and Annotated Sheet. To maintain consistency with the specification and the remaining Figures, reference number 46 has been changed to 47 in both Fig. 6 and Fig. 7. As amended, the translating retraction plate 47 is shown in the embodiment illustrated in Figs. 5, 6, and 7 while the pivoting retraction plate 46 is shown in the embodiment illustrated in Figs. 3, 4A and 4B. Thus, reference numbers 46 and 47 now refer to different entities. These amendments correct the Examiner's grounds for objection and withdrawal of the objection is respectfully requested.

Aside from the Examiner's objections, Applicants have also amended Fig. 6 as shown in the attached Replacement Sheet and Annotated Sheet to change reference number 80 to reference number 81. The number 80 is used elsewhere in the Figures and the specification in association with a pinion gear. Thus, the Z-slot formerly referenced by the same number 80 is

now reference by the number 81. A corresponding change to the specification is presented herein. Consideration and acceptance of this amendment is respectfully requested.

The Drawing amendments described above do not add new matter. No substantive changes or additions to the specification are made by these changes and Applicant respectfully requests consideration and acceptance thereof.

B. Specification Changes

Applicant is correcting numerical reference discrepancies within the specification. Paragraphs [0031] and [0035] are being replaced in their entirety as shown above. In paragraph [0031], the reference number 80 associated with z-slot 80 is replaced with the reference number 81. Reference number 80 is also associated with a pinion gear 80 (in the specification and as shown in Figure 5). As discussed above, the subject z-slot is referred to in amended Fig. 6 as item 81. Thus, for the sake of consistency and accuracy, the reference number for z-slot 80 in paragraph [0031] is replaced with 81.

In paragraph [0035], Applicants are adding a description of the pin 94 associated with the lower rack 88. The amended sentence now reads, "The lower rack plate 88 is constrained to motion in the x-direction by the engagement of a lower rack plate pin 94 in a lower x-slot 96 formed in the lower gearbox frame 49." This amendment is consistent with the embodiment illustrated in Fig. 7. Further, this amendment tracks identical language used to describe similar pins 72 and slots 76 shown in Fig. 6 and described in paragraph [0030]. The specific language from paragraph [0030] reads, "The upper rack plate 64 is constrained to translation in the x-direction by the engagement of upper rack plate pins 72 in upper x-slots 76 formed in the gearbox frame 49." Thus, this amendment does not add new matter as the functionality was clearly shown in the Figures and inferred from existing language. No substantive changes or

additions to the specification are made by these changes and Applicant respectfully requests consideration and acceptance thereof.

C. Claim Rejections

The Examiner has rejected all pending claims 1-40 under §102(b) or §103(a) as being anticipated by *Sameshima et al.* or obvious over the combination of *Sameshima et al.* and either *Merrifield et al.* or *Morita et al.* Without conceding the appropriateness of these rejections, Applicant has elected to amend independent claims 1, 12, 16, and 30 to refine the scope of the claims and emphasize the distinguishable aspects of Applicant's invention. Applicants respectfully traverse the rejection of independent claim 34 as none of the prior art references teaches or suggests all the limitations recited in claim 34.

I. Claims 1-11

Claim 1 has been amended to recite "a retraction plate movable *in a substantially axial direction relative to said rollers* between engaged and retracted positions." Correspondingly, claim 11, which depends from claim 1, has been amended to remove the limitation, "in the axial direction of said rollers." None of the prior art references relied upon by the Examiner teaches or suggests the limitation added to claim 1. *Sameshima et al.* shows a conveyance module 5 that pivots in a direction generally perpendicular to the axes of parallel image carriers 1, chargers 2, and developers 4. Further, movement plates 29, 30 and sliding plates 34, 35 also slide between engaged and retracted positions along a direction generally perpendicular to the parallel image carriers 1, chargers 2, and developers 4. *Merrifield et al.* is relied upon by the Examiner as disclosing the use of Oldham couplers. *Morita et al.* is relied upon by the Examiner as disclosing a rack and pinion gear system to displace a cartridge base 50. However, *Merrifield et al.* discloses the use of this rack 51 and pinion gear P1 to displace the cartridge

base obliquely upward in a direction generally perpendicular to parallel roller members (see e.g., Fig. 3 and the text at column 8, lines 25-29).

Accordingly, Applicants believe that none of the prior art references disclose a retraction plate moveable in a direction that is generally parallel to cartridge rollers. Thus, independent claim 1 and claims 2-11 depending therefrom, are patentable over the prior art of record.

II. Claims 12-15

Claim 12 now recites “each of the plurality of rollers being disposed in a substantially parallel configuration, the pivoting axis oriented substantially orthogonal to the plurality of rollers.” None of the prior art references relied upon by the Examiner teaches or suggests this limitation. As indicated above, *Sameshima et al.* shows a conveyance module 5 that pivots about an axis that is generally parallel to the parallel image carriers 1, chargers 2, and developers 4. Further, movement plates 29, 30 and sliding plates 34, 35 do not pivot, but instead slide between engaged and retracted positions along a direction generally perpendicular to the parallel image carriers 1, chargers 2, and developers 4. It appears that the limitations in claim 12 are not disclosed in the prior art. Therefore, independent claim 12 and claims 13-15 depending therefrom, are patentable over the prior art of record.

III. Claims 16-29

Amended claim 16 recites “movement of said articulating member in said first lateral direction is operative to translate said retraction plate in a second lateral direction generally orthogonal to said first lateral direction *and generally parallel to an axis through one of the plurality of rollers*, thereby moving said plate between said retracted and engaged positions.” None of the prior art references relied upon by the Examiner teaches or suggests a retraction plate that translates in a direction generally parallel to a roller axis. Since it appears that the

limitations in claim 16 are not disclosed in the prior art, independent claim 16 and claims 17-29 depending therefrom, are patentable over the prior art of record.

IV. Claims 30-33

Independent claim 30 now recites a method comprising, “moving said coupling to an engaged position in which said coupling transfers rotary power to said cartridge, by moving said retraction plate *in the axial direction of said coupling* such that said coupling moves in an axial direction towards said cartridge.” *Sameshima et al.* shows a conveyance module 5 that pivots about an axis that is generally parallel to the parallel image carriers 1, chargers 2, and developers 4. This motion imparts motion of a joint movement plate 29 that moves downward (perpendicular to the roller axes) via a lateral (again, perpendicular to the roller axes) sliding plate 34. Other components move or rotate (none in a direction parallel to the roller axes) to impart a separation force on an individual drive coupling (item 47 relative to item 56 in Figs. 6 and 7). However, *Sameshima et al.* does not show that this motion is induced by moving a retraction plate in an axial direction of said coupling. None of the other prior art references relied upon by the Examiner teach or suggest this axially-moving retraction plate limitation. Accordingly, claim 30 and claims 31-33 depending therefrom are patentable over the prior art of record.

V. Claims 34-40

Independent claim 34 recites groups of first and second cartridges. The first cartridges include a developer member while the second cartridges include a photoconductive member. None of the prior art references relied upon by the Examiner disclose separate cartridges having these members. It does not appear that the Examiner addressed these particular limitations because claim 34 was rejected simply by reference to the arguments used in

rejecting claims 1-5 (Office Action dated 12 July 2005, Page 5, Paragraph 18). However, claims 1-5 do not include the first and second cartridge limitations. The configurations disclosed in the prior art references combine a developer member and a photoconductive member in a common cartridge. Accordingly, claim 34 and claims 35-40 depending therefrom are patentable over the prior art of record.

D. Conclusion

Applicant respectfully requests consideration of the above remarks and amendments. If the Examiner feels a telephone conversation is necessary for discussing the issues, he is invited to call the number indicated below. Thank you for your time and examination in this matter.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

By:

A handwritten signature in black ink, appearing to read 'D. Kalish', written over a horizontal line.

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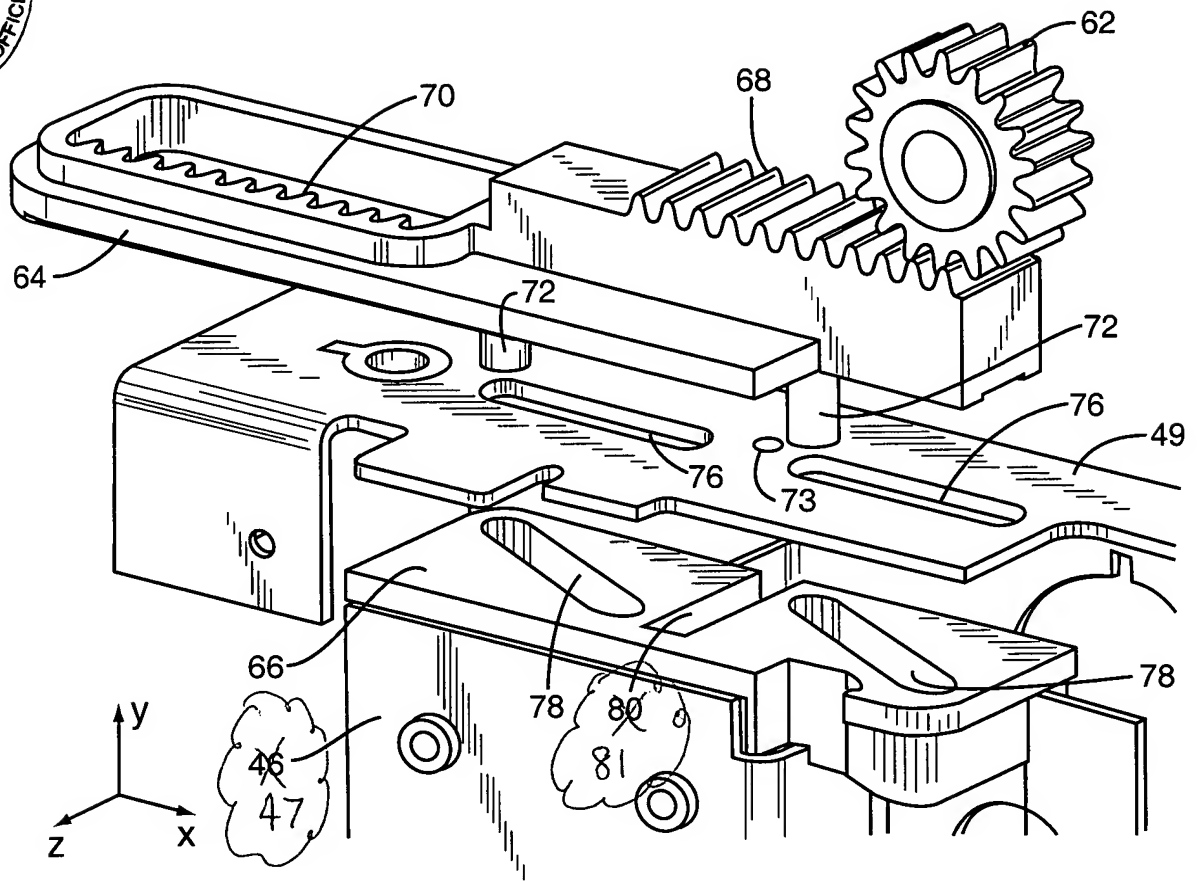


FIG. 6

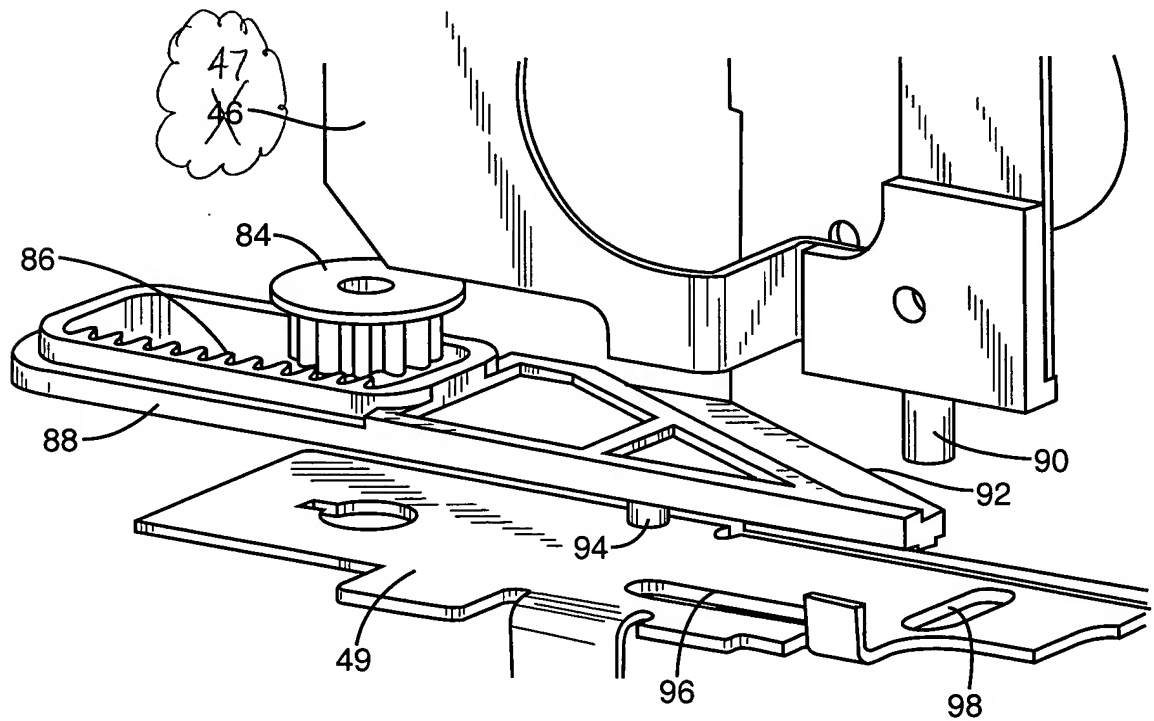


FIG. 7